

Listing of Claims

Claim 1. (Original) A system for providing a programming signal containing a program and at least one address identifying online content relating to the program from an online information source, the system comprising:
a first transmitter, wherein the transmitter transmits the program to a user site; and
a second transmitter, wherein the second transmitter transmits the address to the user site, wherein, at some time after receipt of the address at the user site, the online content is automatically retrieved and presented to a user at the user site in conjunction with the program.

Claim 2. (Original) A system as described in claim 1, wherein the first transmitter and the second transmitter are co-located in the same facility.

Claim 3. (Original) A system as described in claim 2, wherein the first transmitter and the second transmitter are co-located at a Web hosting site.

Claim 4. (Original) A system as described in claim 1, wherein the first transmitter and the second transmitter are located in separate locations.

Claim 5. (Original) A system as described in claim 4, wherein the second transmitter is located at a Web hosting site.

Claim 6. (Original) A system as described in claim 1, wherein the address is transmitted during the transmission of the program.

Claim 7. (Original) A system as described in claim 1, wherein the address is transmitted prior to the transmission of the program.

Claim 8. (Original) A system as described in claim 1, wherein the address is transmitted at a predetermined time during the transmission of the program.

Claim 9. (Original) A system as described in claim 1, wherein the second transmitter transmits a plurality of addresses.

Claim 10. (Original) A system as described in claim 9, wherein each of the plurality of addresses is transmitted at certain predetermined times during the program.

Claim 11. (Original) A system as described in claim 1, wherein the first transmitter is located at one of the sites selected from the group consisting of: a cable head-end, a program operations center, a satellite operations center, an Internet site, an intranet site, a private network site, and a public network site.

Claim 12. (Original) A system as described in claim 1, wherein the second transmitter is located at one of the sites selected from the group consisting of: a cable head-end, a program operations center, a satellite operations center, an Internet site, an intranet site, a private network site, and a public network site.

Claim 13. (Previously Presented) A system as described in claim 1, wherein the programming signal is transmitted via at least one transmission medium selected from the group consisting of: the Internet, an intranet, terrestrial broadcast, cable, satellite broadcast, fiber optics, a telephone circuit, a wireless connection, a private network, and a public network.

Claim 14. (Original) A system as described in claim 1, further comprising a recording medium, wherein the program is a previously recorded program stored on the recording medium, and the first transmitter receives the program from the recording medium.

Claim 15. (Original) A system as described in claim 14, wherein the recording medium is at least one selected from the group consisting of: VHS tape, compact disc, digital versatile disc, magnetic tape, computer hard drive, random access memory, read only memory, CD ROM, a magnetic data storage medium, and an optical data storage medium.

Claim 16. (Original) A system as described in claim 1, wherein the program is transmitted as a live event.

Claim 17. (Original) A system as described in claim 1, wherein the program comprises at least one form selected from the group consisting of: audio, video, data, graphics, animation, text, video stills, slow frame video, and multimedia.

Claim 18. (Original) A system as described in claim 1, wherein the address is an Internet URL, the URL identifying the online information source which is an Internet site.

Claim 19. (Original) A system as described in claim 1, further comprising a memory device for storing the address prior to transmission by the second transmitter.

Claim 20. (Original) A system as described in claim 19, wherein the memory device is at least one selected from the group consisting of: compact disc, digital versatile disc, magnetic tape, computer hard drive, random access memory, read only memory, CD ROM, a server, a magnetic data storage medium, and an optical data storage medium.

Claim 21. (Original) A system as described in claim 1, wherein the online information source is an Internet service provider.

Claim 22. (Original) A system as described in claim 1, wherein the online information source comprises one selected from the group consisting of: an intranet, the Internet, a public network, and a private network.

Claim 23. (Original) A system as described in claim 1, wherein the online content comprises content in a form selected from the group consisting of: text, graphics, video, data, audio, animation, video stills, slow frame video, and multimedia.

Claim 24. (Original) A system as described in claim 1, wherein the program is a sports program.

Claim 25. (Original) A system as described in claim 1, wherein the program is an advertisement.

Claim 26. (Original) A system as described in claim 1, wherein the online content is an advertisement.

Claim 27. (Original) A system as described in claim 1, wherein the program is a motion picture program.

Claim 28. (Original) A system as described in claim 1, wherein the program is a game show program.

Claim 29. (Original) A system as described in claim 1, wherein the program is a video program.

Claim 30. (Original) A system as described in claim 1, wherein the program is a live program.

Claim 31. (Original) A system as described in claim 1, wherein the program is an audio program.

Claim 32. (Original) A system as described in claim 1, wherein the program is a music video program.

Claim 33. (Original) A system as described in claim 1, wherein the program is a news program.

Claim 34. (Original) A system as described in claim 1, wherein the programming signal is in digital format.

Claim 35. (Original) A system as described in claim 1, wherein the programming signal is in analog format.

Claims 36 - 38. (Canceled)

Claim 39. (Original) A system as described in claim 1, wherein the online content relates to a sitcom program.

Claim 40. (Original) A system as described in claim 1, wherein the online content relates to an interactive game show program.

Claim 41. (Original) A system as described in claim 1, wherein the online content is stored in one selected from the group consisting of: magnetic tape, compact disc, digital versatile disc, computer hard drive, random access memory, read only memory, CD ROM, a magnetic data storage medium, and an optical data storage medium.

Claim 42. (Canceled)

Claim 43. (Original) A system as described in claim 32, wherein the online content contains additional information related to the music video program selected from the group consisting of biographical information on an artist, concert schedule, and information on buying goods related to the artist.

Claims 44 - 60. (Canceled)

Claim 61. (Original) A method for providing a programming signal containing a program and at least one address identifying online content relating to the program from an online information source, the method comprising the steps of:
transmitting the program to a user site; and
providing the address to the user site,
wherein, at some time after receipt of the address at the user site, the online content is automatically retrieved and presented to a user at the user site in conjunction with the program.

Claim 62. (Original) A method as described in claim 61, wherein the transmitting step and the providing step originate from the same location.

Claim 63. (Original) A method as described in claim 62, wherein the transmitting step and the providing step occur at a Web hosting site.

Claim 64. (Original) A method as described in claim 61, wherein the transmitting step and the providing step originate from different locations.

Claim 65. (Original) A method as described in claim 64, wherein the providing step occurs at a Web hosting site.

Claim 66. (Original) A method as described in claim 61, wherein the address providing step occurs during the program transmitting step.

Claim 67. (Original) A method as described in claim 61, wherein the address providing step occurs prior to the program transmitting step.

Claim 68. (Original) A method as described in claim 61, wherein the address providing step occurs at a predetermined time during the program transmitting step.

Claim 69. (Original) A method as described in claim 61, wherein the address providing step further comprises the step of providing a plurality of addresses.

Claim 70. (Original) A method as described in claim 69, wherein each of the plurality of addresses are transmitted at certain predetermined times during the program.

Claim 71. (Original) A method as described in claim 61, wherein the program transmitting step occurs at one of the sites selected from the group consisting of: a cable head-end, a program operations center, a satellite operations center, an Internet site, an intranet site, a private network site, and a public network site.

Claim 72. (Original) A method as described in claim 61, wherein the address providing step occurs at one of the sites selected from the group consisting of: a cable head-end, a program operations center, a satellite operations center, an Internet site, an intranet site, a private network site, and a public network site.

Claim 73. (Original) A method as described in claim 61, wherein the transmitting step is performed via at least one transmission medium selected form the group consisting of: the Internet, an intranet, terrestrial broadcast, cable, satellite broadcast, fiber optics, a telephone circuit, a wireless connection, a private network, and a public network.

Claim 74. (Original) A method as described in claim 61, wherein the program is a previously recorded program and further comprising the step of storing the program on a recording medium.

Claim 75. (Original) A method as described in claim 74, wherein the recording medium is at least one selected from the group consisting of: VHS tape, compact disc, digital versatile disc, magnetic tape, computer hard drive, random access memory, read only memory, CD ROM, a magnetic data storage medium, and an optical data storage medium.

Claim 76. (Original) A method as described in claim m 61, wherein the program is transmitted as a live event.

Claim 77. (Original) A method as described in claim 61, wherein the program comprises at least one form selected from the group consisting of: audio, video, data, graphics, animation, text, video stills, slow frame video, and multimedia.

Claim 78. (Original) A method as described in claim 61, wherein the address is an Internet URL, the URL identifying the online information source which is an Internet site.

Claim 79. (Original) A method as described in claim 61, further comprising the step of storing the address in a memory device prior to providing the address.

Claim 80. (Original) A method as described in claim 79, wherein the memory device is at least one selected from the group consisting of: compact disc, digital versatile disc, magnetic tape, computer hard drive, random access memory, read only memory, CD ROM, a server, a magnetic data storage medium, and an optical data storage medium.

Claim 81. (Original) A method as described in claim 61, wherein the online information source is an Internet service provider.

Claim 82. (Original) A method as described in claim 61, wherein the online information source comprises one selected from the group consisting of: an intranet, the Internet, a public network, and a private network.

Claim 83. (Original) A method as described in claim 61, wherein the online content comprises content in a form selected from the group consisting of: text, graphics, video, data, audio, animation, video stills, slow frame video, and multimedia.

Claim 84. (Original) A method as described in claim 61, wherein the program is a sports program.

Claim 85. (Original) A method as described in claim 61, wherein the program is an advertisement.

Claim 86. (Original) A method as described in claim 61, wherein the online content is an advertisement.

Claim 87. (Original) A method as described in claim 61, wherein the program is a motion picture program.

Claim 88. (Original) A method as described in claim 61, wherein the program is a game show program.

Claim 89. (Original) A method as described in claim 61, wherein the program is a video program.

Claim 90. (Original) A method as described in claim 61, wherein the program is a live program.

Claim 91. (Original) A method as described in claim 61, wherein the program is an audio program.

Claim 92. (Original) A method as described in claim 61, wherein the program is a music video program.

Claim 93. (Original) A method as described in claim 61, wherein the program is a news program.

Claim 94. (Original) A method as described in claim 61, wherein the programming signal is in digital format.

Claim 95. (Original) A method as described in claim 61, wherein the programming signal is in analog format.

Claims 96 - 99. (Canceled)

Claim 100. (Original) A method as described in claim 61, wherein the online content relates to a sitcom program.

Claim 101. (Original) A method as described in claim 61, wherein the online content relates to an interactive game show program.

Claim 102. (Original) A method as described in claim 61, wherein the online content is stored in a storage device selected from the group consisting of: magnetic tape, compact disc, digital versatile disc, computer hard drive, random access memory, read only memory, CD ROM, a magnetic data storage medium, and an optical data storage medium.

Claim 103. (Original) A method as described in claim 61, wherein the online content relates to a polling question.

Claim 104. (Original) A method as described in claim 92, wherein the online content contains additional information related to the music video program selected from the group consisting of biographical information on an artist, concert schedule, and information on buying goods related to the artist.

Claims 105 - 109. (Canceled)

Claim 110. (Original) An apparatus for encoding at least one address into a programming signal wherein the address identifies an Internet information segment at an Internet site, the segment related to a program provided in the programming signal, the apparatus comprising:
an input for receiving a programming signal;
an encoder for embedding the address into the programming signal, the address identifying the Internet site containing the Internet information segment; and
an output port for outputting a programming signal which includes the embedded address,
wherein the encoder inserts the address into the programming signal such that Internet information is automatically pushed to a user system at some time after reception and extraction of the address from the programming signal by the user system.

Claim 111. (Original) A method, for embedding an address into a programming signal, wherein the address identifies an Internet source of an online information segment which is associated with the programming signal, the method comprising:
generating the programming signal;
obtaining at least one address identifying the Internet source of the online information

segment associated with the programming signal;
determining when the content in the programming signal is to be presented to a user relative to a fixed reference frame; and
embedding the address into a location within the programming signal based upon the determination of when the content is to be presented,
whereby the online information segment is automatically pushed to the user upon the user receiving the programming signal and extracting the address from the programming signal.

Claims 112 - 114. (Canceled)

Claim 115. (Original) A system for transmitting video programming and at least one address useable for retrieving from at least one server on a network on-line information segments having content related to the video programming, comprising:
a broadcast system for sending to a viewer a signal carrying video programming for viewing by the viewer; and
an address server on the network for sending in respective specified timing relationship with the video programming the at least one address over the network to the viewer, wherein the on-line information segments retrieved over the network from the at least one server using the at least one address are viewable by the viewer in a predetermined timing relationship with the viewing of the video programming.

Claim 116. (Original) A system as described in claim 115, wherein the address server sends each one of the at least one address with an associated time indicia for controlling when each one of the at least one address are to be used to retrieve respective ones of the on-line information segments so as to be viewable by the viewer in respective predetermined timing relationship with the viewing of the video programming.

Claim 117. (Original) A system as described in claim 115, wherein the network comprises the Internet; the at least one server comprises at least one Internet web site; the at least one address comprises at least one uniform resource locator; and the on-line information segments comprise at least one web page retrievable from the at least one Internet web site using the at least one uniform resource locator.

Claim 118. (Original) A system as described in claim 115, wherein the video programming comprises educational subject matter.

Claim 119. (Original) A system as described in claim 115, wherein the video programming comprises entertainment subject matter.

Claim 120. (Original) A system as described in claim 115, wherein the video programming comprises advertising subject matter.

Claim 121. (Original) A system as described in claim 115, wherein the online information segments include a request for viewer response and wherein the network has a two-way capability enabling the viewer to enter information in response to the request included in the on-line information segments.

Claim 122. (Original) A system as described in claim 117, wherein the network is the Internet, and the at least one web page includes a request for viewer response and enables the viewer to enter information in response to the request included in the at least one web page.

Claim 123. (Original) A system as described in claim 121, wherein the request for viewer response is related to advertising subject matter of the video programming.

Claim 124. (Original) A system as described in claim 121, wherein the request for viewer response comprises an offer to sell a product or service, and the viewer is enabled to enter response information making a purchase of the product or the service.

Claim 125. (Previously Presented) A system as described in claim 115, further comprising a computer on the network for creating at least certain ones of the on-line information segments retrievable from respective ones of the at least one server and storing the created on-line information segments at the respective ones of the at least one server, wherein at least one address for retrieving the created on-line information segments is provided to the address server for sending to the viewer in respective specified timing relationship with the video programming.

Claim 126. (Original) A system as described in claim 115, wherein the broadcast system is a television transmission system, and the signal is a television signal.

Claim 127. (Original) A system as described in claim 126 wherein the television signal is analog.

Claim 128. (Original) A system as described in claim 126, wherein the television signal is digital.

Claim 129. (Original) A system as described in claim 115, wherein the broadcast system is selected from a group consisting of a terrestrial broadcast system, a satellite broadcast system, a cable distribution system, a fiberoptic distribution system, the Internet, a private network, and a public network.

Claim 130. (Original) A method for transmitting video programming and at least one address useable for retrieving over a network from at least one server on the network on-line visual information segments having content related to the video programming to a viewer, comprising the steps of:

broadcasting a signal carrying the video programming to a viewer for viewing; and sending to the viewer over the network in respective specified timing relationship with the video programming the at least one address for retrieving the on-line information segments from the at least one server,

wherein the on-line information segments are viewable by the viewer in respective predetermined timing relationship with the viewing of the video programming.

Claim 131. (Original) A method as described in claim 130, wherein the step of sending the at least one address comprises sending each one of the at least one address with an associated time indicia for controlling when each one of the at least one address is to be used for retrieval of respective ones of the on-line information segments so that the on-line information segments are viewable by the viewer in respective predetermined timing relationship with the viewing of the video programming.

Claim 132. (Original) A method as described in claim 130, further comprising the step of creating at least certain ones of the on-line information segments retrievable from respective ones of the at least one server, and wherein at least one address sent to the viewer in respective specified timing relationship with the video programming is for retrieving the created on-line information segments.

Claim 133. (Original) A method as described in claim 130, wherein the network comprises the Internet, the at least one address comprises at least one uniform resource locator, the at least one network server comprises at least one Internet web site, and the on-line information segments comprise at least one web page retrievable over the Internet from respective ones of the at least one Internet web site using the at least one uniform resource locator.

Claim 134. (Original) A method as described in claim 130, wherein the video programming comprises educational subject matter.

Claim 135. (Original) A method as described in claim 130, wherein the video programming comprises entertainment subject matter.

Claim 136. (Original) A method as described in claim 130, wherein the video programming comprises advertising subject matter.

Claim 137. (Original) A method as described in claim 130, wherein the on-line information segments include a request for viewer response and wherein the network has a two-way capability enabling the viewer to enter information in response to the request included in the on-line information segments.

Claim 138. (Original) A method as described in claim 137, wherein the request for viewer response is related to advertising subject matter of the video programming.

Claim 139. (Original) A method as described in claim 137, wherein the request for viewer response comprises an offer to sell a product or service and the viewer is enabled to enter response information making a purchase of the product or the service.

Claim 140. (Original) A method as described in claim 130, wherein the step of broadcasting a signal is selected from a group consisting of: terrestrial broadcasting, satellite broadcasting, distributing the signal by cable, distributing the signal by optical fiber, distributing the signal via the Internet, distributing the signal via a private network, and distributing the signal via a public network.

Claim 141. (Original) A system for transmitting video programming and at least one address useable for retrieving over a network from at least one server on the network on-line information segments having content related to the video programming, comprising:
an address source for providing the at least one address; and
a broadcast system for sending a signal carrying the video programming to a viewer, the broadcast system being responsive to the address source for encoding the signal to carry the at least one address in respective specified timing relationship with the video programming,

wherein the at least one address encoded in the signal may be extracted by a decoder from the signal, and the signal is provided to a receiver for presenting the video programming, and wherein the at least one address extracted from the signal may be used by a processor coupled to the network to retrieve over the network the on-line information segments from the at least one server for viewing in respective predetermined timing relationship with the video programming.

Claim 142. (Original) A system as described in claim 141, wherein each one of the at least one address encoded by the broadcast system to be carried by the signal includes an associated time indicia for controlling when each one of the at least one address is to be used for retrieving respective ones of the on-line information segments so that the on-line information segments are retrieved for viewing in respective predetermined timing relationship with the video programming.

Claim 143. (Original) A system as described in claim 141, wherein the network is the Internet; the at least one address comprises at least one uniform resource locator; the at least one server comprises at least one Internet web site; and the on-line information segments

comprise at least one web page retrievable from the at least one Internet web site using the at least one uniform resource locator.

Claim 144. (Original) A system as described in claim 141, wherein the decoder is located in proximity to the receiver and the processor.

Claim 145. (Original) A system as described in claim 141, wherein the decoder is located remotely from the receiver and the processor, and the at least one address extracted from the encoded signal is provided to the processor over the network.

Claim 146. (Original) A system as described in claim 141, wherein the broadcast system further comprises an encoder responsive to the address source for encoding the signal to carry the at least one address in respective specified timing relationship with the video programming.

Claim 147. (Original) A system as described in claim 142, wherein the broadcast system further comprises an encoder responsive to the address source for encoding the signal with the at least one uniform resource locator in respective specified timing relationship with the video programming.

Claim 148. (Original) A system as described in claim 141, wherein the video programming comprises entertainment subject matter.

Claim 149. (Original) A system as described in claim 141, wherein the video programming comprises educational subject matter.

Claim 150. (Original) A system as described in claim 141, wherein the video programming comprises advertising subject matter.

Claim 151. (Original) A system as described in claim 141, further comprising a computer on the network for creating at least certain ones of the on-line information segments retrievable from respective ones of the at least one server and storing the created on-line information segments at respective ones of the at least one server, wherein at least one address for retrieving the created on-line information segments is provided to the address source and

encoded in the signal transmitted to the viewer in respective specified timing relationship with the video programming.

Claim 152. (Original) A system as described in claim 141, wherein the broadcast system is a television transmission system, and the signal is a television signal.

Claim 153. (Original) A system as described in claim 152, wherein the television signal is analog.

Claim 154. (Original) A system as described in claim 152, wherein the television signal is digital.

Claim 155. (Original) A system as described in claim 141, wherein the broadcast system is selected from a group consisting of a terrestrial broadcast system, a satellite broadcast system, a cable distribution system, a fiberoptic distribution system, the Internet, a private network and a public network.

Claim 156. (Original) A system for transmitting to users video programming and at least one address useable for retrieving over a network from at least one network server on the network on-line information segments having content related to the video programming, comprising:

a broadcast system for sending a signal carrying the video programming to a viewer, the signal further carrying the at least one address encoded therein in respective specified timing relationship with the video programming,

wherein the at least one address encoded in the signal may be extracted by a decoder from the signal, and the signal is provided to a receiver for presentation of the video programming, and wherein the at least one address extracted from the signal may be used by a processor coupled to the network to retrieve over the network the on-line information segments from the at least one server for displaying in respective predetermined timing relationship with the presentation of the video programming.

Claim 157. (Original) A system as described in claim 156, wherein each of the at least one address encoded by the broadcast system to be carried by the signal includes an

associated time indicia controlling when each one of the at least one address is to be used to retrieve respective ones of the on-line information segments for display in respective predetermined timing relationship with the presentation of the video programming.

Claim 158. (Original) A system as described in claim 156, wherein the network is the Internet; the at least one address comprises at least one uniform resource locator; the at least one server comprises at least one Internet web site; and the on-line information segments comprise at least one web page retrievable from the at least one Internet web site using the at least one uniform resource locator.

Claim 159. (Original) A system as described in claim 156, wherein the decoder is located in proximity to the receiver and the processor.

Claim 160. (Original) A system as described in claim 156, wherein the decoder is located remotely from the receiver and the processor, and the at least one address extracted from the encoded signal is provided to the processor over the network.

Claim 161. (Original) A system as described in claim 156, wherein the broadcast system further comprises an encoder for encoding the signal to carry the at least one address in respective specified timing relationship with the video programming.

Claim 162. (Original) A system as described in claim 157, wherein the broadcast system further comprises an encoder for encoding the signal with the at least one uniform resource locator in respective specified timing relationship with the video programming.

Claim 163. (Original) A system as described in claim 156, wherein the video programming comprises entertainment subject matter.

Claim 164. (Original) A system as described in claim 156, wherein the video programming comprises educational subject matter.

Claim 165. (Original) A system as described in claim 156, wherein the video programming comprises advertising subject matter.

Claim 166. (Original) A system as described in claim 156, further comprising a computer on the network for creating at least certain ones of the on-line information segments retrievable from respective ones of the at least one server and storing the created on-line information segments at respective ones of the at least one server, wherein at least one address for retrieving the created on-line information segments is encoded in the signal transmitted to the viewer in respective specified timing relationship with the video programming.

Claim 167. (Original) A system as described in claim 156, wherein the broadcast system is a television transmission system, and the signal is a television signal.

Claim 168. (Original) A system as described in claim 166, wherein the television signal is analog.

Claim 169. (Original) A system as described in claim 166, wherein the television signal is digital.

Claim 170. (Original) A system as described in claim 156, wherein the broadcast system is selected from a group consisting of a terrestrial broadcast system, a satellite broadcast system, a cable distribution system, a fiberoptic distribution system, the Internet, a private network and a public network.